

Amendments to the Claims

1. (Previously Presented) A flexible fuel hose having improved fuel vapor barrier properties, said fuel hose including a barrier layer forming an inner tubular structure, said barrier layer comprising: a blend of about 5 to 95 weight percent of a first fluoropolymer having a fluorine content of about 68 to 74%, said first fluoropolymer comprising a copolymer or terpolymer formed of two or more monomers selected from the group consisting of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, and about 95 to 5 weight percent of a second fluoropolymer having a fluorine content of about 73 to 78%, said second fluoropolymer comprising a terpolymer formed by the copolymerization of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, wherein said first fluoropolymer exhibits elastomeric characteristics and said second fluoropolymer exhibits thermoplastic characteristics; and a synthetic elastomer material forming a second tubular structure around said barrier.
2. (Original) The hose of claim 1 further comprising a protective cover.
3. (Previously Presented) The hose of claim 2 further comprising a reinforcing layer between said elastomeric layer and said protective cover layer.
4. (Original) The hose of claim 3 wherein said reinforcing layer is a layer of fibers selected from the group consisting of polyamide fibers, polyester fibers, rayon fibers, glass fibers and cotton fibers.
5. (Original) The hose of claim 4 wherein said fibers are polyamide fibers.
6. (Original) The hose of claim 1 wherein said synthetic elastomer layer is selected from the group consisting of nitrile-butadiene rubber, epichlorohydrin rubber, and ethylene-acrylate rubber.
7. (Original) The hose of claim 6 wherein said elastomer layer is butadiene-acrylonitrile rubber.

8. (Original) The hose of claim 1 wherein said protective cover is a layer of synthetic elastomer selected from the group consisting of styrene-butadiene rubber, nitrile-butadiene rubber, chloroprene rubber, chlorinated polyethylene, chlorosulfonated polyethylene, epichlorohydrin-ethylene oxide copolymer, polyvinyl chloride, and blends thereof.

9. (Original) The hose of claim 8 wherein said protective cover is chlorinated polyethylene.

10. (Original) The hose of claim 1 wherein said barrier layer further comprises a conductive material.

11. (Previously Presented) A flexible fuel hose having improved fuel vapor barrier properties, said fuel hose comprising:

a first inner tubular structure comprising a barrier layer formed from a blend of about 5 to 95 weight percent of a first fluoropolymer having a fluorine content of about 68 to 74%, said first fluoropolymer comprising a copolymer or terpolymer formed of two or more monomers selected from the group consisting of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, and about 95 to 5 weight percent of a second fluoropolymer having a fluorine content of about 73 to 78%, said second fluoropolymer comprising a terpolymer formed by the copolymerization of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, wherein said first fluoropolymer exhibits elastomeric characteristics and said second fluoropolymer exhibits thermoplastic characteristics;

a second tubular structure formed around said first tubular structure, said second tubular structure comprising a synthetic elastomeric material selected from the group consisting of acrylonitrile-butadiene rubber, epichlorohydrin, ethylene-acrylate rubber, and mixtures thereof;

a reinforcing member which comprises natural or synthetic fibers selected from the group consisting of glass fibers, cotton fibers, polyamide fibers, polyester fibers, and rayon fibers; and

a protective cover which comprises a synthetic elastomer selected from the group consisting of styrene-butadiene rubber (SBR); butadiene-nitrile rubber; chlorinated polyethylene; chlorosulfonated polyethylene; vinylidene-acrylic rubber; acrylic rubber; epichlorohydrin

rubber; a copolymer of epichlorohydrin and ethylene oxide; polychloroprene rubber (CR); polyvinyl chloride; ethylene-propylene copolymers (EPM); ethylene-propylene-diene terpolymer (EPDM); ultra high molecular weight polyethylene (UHMWPE); high density polyethylene (HDPE); and blends thereof.

12. (Previously Presented) A method for the manufacture of a flexible fuel hose comprising the steps of:

extruding a first tubular structure comprising a blend of about 5 to 95 weight of a first fluoropolymer having a fluorine content of about 68 to 74%, with about 95 to 5 weight percent of a second fluoropolymer having a fluorine content of about 73 to 78%, said first fluoropolymer comprising a copolymer or terpolymer formed of two or more monomers selected from the group consisting of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, and said second fluoropolymer comprising a terpolymer formed by the copolymerization of hexafluoropropylene, tetrafluoroethylene, and vinylidene fluoride monomers, wherein said first fluoropolymer exhibits elastomeric characteristics and said second fluoropolymer exhibits thermoplastic characteristic;

extruding a layer of elastomeric material around said first fluorointerpolymer tubular structure; and

applying a protective cover around said layer of extruded elastomeric material.

13. (Previously Presented) The method of claim 12 wherein said elastomeric material is butadiene-acrylonitrile rubber.

14. (Previously Presented) The method of claim 12 further comprising the step of applying a reinforcing layer on said layer of elastomer material prior to applying said protective cover.

15. (Previously Presented) The method of claim 14 wherein said reinforcing layer is a layer of fibers selected from the group consisting of polyamide fibers, polyester fibers, rayon fibers, glass fibers and cotton fibers.

16. (Previously Presented) The method of claim 15 wherein said reinforcing layer is a layer of

polyamide fibers.

17. (Previously Presented) The method of claim 14 wherein said reinforcing fibers are applied on said second extruded tubular structure by spiraling.

18. (Previously Presented) The method of claim 12 wherein said protective cover is a synthetic elastomer selected from the group consisting of styrene-butadiene rubber, nitrile-butadiene rubber, chloroprene rubber, chlorinated polyethylene, chlorosulfonated polyethylene, epichlorohydrin-ethylene oxide copolymer, polyvinyl chloride, and blends thereof.

19. (Previously Presented) The method of claim 18 wherein said synthetic elastomer is chlorinated polyethylene.

20. (Previously Presented) The method of claim 12 wherein said protective cover is applied by a cross head extruder.